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ABSTRACT

This paper identifies some of the major issues that need to be considered in designing a coherent policy for tuition/fees and student financial aid in California's institutions of higher education. It reviews evidence on the effects of financial aid and tuition and discusses the usefulness of that evidence for policy design. The report identifies some of the basic trends in tuition and financial aid in the state, highlighting the major problems facing the existing system. These include unprecedented fee hikes at public institutions, declining federal grants, increasing competitiveness for state-funded grants, financial aid which has not kept pace with increases in student costs, and more student utilization of loans to finance college. Analysis finds that enrollment at the University of California and the independent colleges appears relatively insensitive to tuition changes but that enrollment at California State University and the community colleges has declined sharply in the 1990s, a period of rapid fee increases. Possible policy changes, such as a move to a "high tuition, high aid" policy are considered. Other possible changes include changing eligibility requirements and funding levels for the state's Cal Grant programs. (DB)

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Issue Brief on Financial Aid and Tuition Policy in California

Dominic Brewer and Tessa Kaganoff

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January 1997

Prepared for the California Education Roundtable

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FINANCIAL AID AND TUITION POLICY IN CALIFORNIA

This document highlights some of the major issues that need to be considered in designing a coherent policy for tuition/fees and financial aid for California higher education. It sets out some of the basic trends in tuition and financial aid in the state, highlighting the major problems facing the existing setup. We begin by arguing that tuition and financial aid policy are important nationally, primarily in ensuring student access to college. Details of the tuition/fees and financial aid structure in California are then described, along with recent trends, after which problems with the current system in light of its goals are analyzed. Finally, various proposals for changes to the system are examined.

WHY TUITION, FEES, AND FINANCIAL AID ARE IMPORTANT

Almost all institutions of higher education in the United States impose charges on the students attending them in the form of tuition, fees, and/or residence charges. Typically these charges are designed to partially offset the instructional and other costs of operating a college or university. Rarely, however, do they fully cover the costs of an education on a per-student basis. Institutions use supplemental income from other sources to cover their costs: large public subsidies in the case of publicly controlled institutions, and income from endowments or gifts in the case of independently controlled schools.

Similarly, rarely do students pay the full posted "sticker" price for attendance at an institution. A large proportion of students receive financial aid in the form of grants and scholarships, work study programs, and subsidized or unsubsidized loans—from federal, state, private, or institutional sources—to partially offset the posted tuition/fees payable. For example, while the average cost of an independent college (including room and board) was more than $18,000 in 1995, the average student paid about half that. The nation's huge investment in student financial aid is designed to ensure that all those who are academically qualified can undertake some form of postsecondary education.

The tuition charged minus any financial aid received determines to some extent whether an individual can attend college, what type of college he/she can attend, and for how long. (Other factors may also influence an individual's enrollment decisions, such as employment opportunities and the economic climate.) The interaction between financial aid and tuition/fees determines the net income an institution receives from students, which in turn influences the programs that can be offered, the quality of student services provided, and the caliber of personnel that institutions can hire. For these reasons, the tuition and financial aid policies of the higher education sector are of crucial significance.

It is obvious too that tuition and financial aid policies are inextricably linked. Together they determine net student-generated revenue for institutions and the net price students actually pay to attend

college. Any rational public policy needs to recognize the clear interrelationship between these two variables.[1]

During the last 10 years the cost of attending college rose nationwide at more than double the rate of general inflation (college tuition and fees were up 256% from 1980-95 versus 80% in the CPI). During this period of rapid cost increase, family income grew at a much slower rate, and the value of federal and many state financial aid grants failed to keep pace. This has led to increasing reliance on loans on the part of students[2] and dramatic increases in institutional aid, especially to offset higher tuition for low-income students.[3] Reductions in the growth of state appropriations[4] for public institutions have led to an increasing reliance on revenue from tuition at these schools; a similar trend is evident at independent institutions.[5] Although there are some signs that increases in tuition may be slowing,[6] widespread concern over the affordability of college continues, as evidenced by numerous articles in the popular press and a national commission.[7]

These national trends have been mirrored in the California higher education sector. Average student fees have grown dramatically in the past five years at the state's traditionally no-fee or low-fee public institutions, particularly when compared to median household income.[8] While federal aid continues to support many students, it is increasingly loan based, and the demands on the state aid program (Cal Grants) have far outstripped the awards available. Institutional aid has grown to meet some of the rising costs of college. These trends are discussed in more detail after a brief summary of what is

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[1]Financial aid and tuition policy clearly affect *institutional* behavior as well as student behavior. There is much less written on this topic, and we do not discuss it here in any detail. For example, Michael S. McPherson and Morton Schapiro, in *Keeping College Affordable: Government and Educational Opportunity* (Washington, D.C.: Brookings, 1991) find that increases in federal student grants cause public four-year schools to raise their tuition but do not affect tuition at independent four-year schools (p. 74). Another recent study argues that student aid increases helped drive up tuition costs at four elite colleges (Charles Clotfelter, *Buying the Best: Cost Escalation in Elite Higher Education*, Princeton University Press, 1996).

[2]Student debt exploded in the 1980s and has continued to do so in the 1990s. The latter jump was largely due to 1993/4 changes in federal unsubsidized Stafford loans that allow students to borrow regardless of need (see *College Debt and the American Family*, Washington, D.C.: Institute for Higher Education Policy, 1995).

[3]See, for example, Arthur M. Hauptman, *The Tuition Dilemma: Assessing New Ways to Pay for College*, Washington, D.C.: Brookings, 1990.

[4]Nearly two-thirds of all public institutions receive less state financial support than they did 10 years ago according to a survey of 400 colleges and universities (Elaine El-Khawas and Linda Knopp, *Campus Trends, 1996*, American Council on Education, 1996).

[5]See *The Costs of Higher Education*, Washington, D.C.: National Center for Education Statistics, 96-769, May. The average annual rate of increase in tuition and fees in constant dollars has been almost 5% at both public and independent universities and colleges, and around 4% at two-year colleges (p. 3). The increasing importance of tuition revenues as a percentage of total revenues has occurred for all types of institution. For example, 22% of revenues at public universities and at public two-year colleges came from tuition in 1992, versus 16% in 1980; for independent universities the increase was from 40% to 45% (p. 7).

[6]*New York Times*, January 24, 1996, p. A1; *Forbes*, November 18, 1996, pp. 108-117.

[7]*Making College Affordable Again: Final Report*, National Commission on Responsibilities for Financing Postsecondary Education, 1993. See also *The Next Step: Student Aid for Student Success*, Washington, D.C.: The Institute for Higher Education Policy, for a discussion of other policy options pertaining to financial aid.

[8] Lawrence Gladieux and Jacqueline King, *Trends in Student Aid: California*, San Jose: California Higher Education Policy Center, 1995, pp. 2-3.

known—and what knowledge is needed—about the effects of tuition and financial aid on student behavior.

EVIDENCE ON THE EFFECTS OF FINANCIAL AID AND TUITION, AND THE USEFULNESS OF THAT EVIDENCE FOR POLICY DESIGN

In designing a financial aid and tuition policy for California we need to know how different types of students applying to or attending different types of institutions would respond to various levels and types of tuition and/or financial aid. The overriding goal of public policy on tuition and financial aid is to provide as many academically qualified students as possible with the opportunity to attend some form of postsecondary schooling, regardless of financial need. While the primary burden for paying the cost of college in the U.S. has always fallen on students and their families, low-cost public institutions and federal, state, and institutional aid have enabled millions of students of all economic backgrounds to attend college. These policies are widely believed to have positive effects on students' decisions on whether to enroll in college, to attend higher cost (and perhaps higher quality) colleges, and to stay in college until the completion of their program.

Although conceptually it seems clear that tuition policy and financial aid policy have important effects on both institutions and students, is this borne out by the evidence? There is a vast body of academic literature on this issue.[9] While generally confirming the importance of net price in influencing student behavior in the expected direction, the evidence is much less definitive on the magnitude of the effects. There are also important gaps in the understanding of how tuition and aid may have differential effects, the role of information, and the effects of tuition and aid on students of different racial/ethnic groups. These omissions make this literature less than informative for policy design purposes. Does aid have differential effects from tuition? The evidence on this is inconclusive. Theoretically, a dollar decrease in tuition should be equivalent to a dollar increase in aid, but the evidence (which is scant) is that students respond more to tuition than to aid, probably because of a lack of information about the availability of aid.[10]

Three major questions have been examined.[11] First, does financial aid promote access to college? Second, does financial aid broaden the choice of college? Third, does financial aid influence persistence/retention? Most studies have focused on the effects of federal aid policy on low-income students. Econometric studies, which typically use cross-section data, show that enrollment of low-income students is perhaps 20-40% higher as a result of grants, with less than half this effect for higher-income students.

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[9] A comprehensive review may be found in Larry L. Leslie and Paul T. Brinkman's *The Economic Value of Higher Education*, Macmillan, 1988. See also McPherson and Schapiro, *Keeping College Affordable*. A literature review is also contained in Stephen P. Klein, Stephen J. Carroll, Jennifer Hawes-Dawson and Daniel McCaffrey, *Interactions Among Gift-Aid Programs in Indiana*, R-4218-LE, Santa Monica, CA: RAND.

[10] There is some evidence, for example, that students persistently overestimate the costs of college. A recent American Council on Education study found that of 1,000 adults surveyed on net tuition costs, *all* of them overestimated the actual average price.

[11] Leslie and Brinkman, *The Economic Value*, pp. 135-180.

The greater sensitivity of low-income students to changes in aid (and/or tuition) relative to higher income groups is a common result. Since the enrollment decisions of middle- and upper-income students appear to be only minimally influenced by aid policy,[12] aid to this group of students may serve more as a subsidy than an incentive for higher rates of enrollment. But there is a wide range of estimates, and these differ by type of aid, sex, race, and level of academic achievement.[13] One analysis of time-series trends in enrollment has produced more controversial findings.[14]

Student aid should not only allow students to enroll who otherwise might not be able to do so, but should also allow students to attend a wider range of institutions than would be possible in the absence of aid. The analysis of the effects of aid on choice is very complex, however. Broadly speaking, the evidence from econometric analyses again suggests that aid has the intended effect. Students are more likely to attend an institution that makes a higher aid offer, and hence aid can change the relative attractiveness of competing institutions. Anecdotal evidence from the institutional perspective confirms this: many schools, particularly in the independent sector, devote considerable resources to packaging financial aid offers so as to attract the students they wish to have attend.[15] With regard to persistence, Leslie and Brinkman[16] reached the conclusion that the overall effect of aid is to enable recipients to persist as well as nonrecipients do, but that there may be differential effects over time and by type of student. Higher levels of aid and grants, rather than loans, increase persistence. Again, though, there is a wide range of estimates.

Overall, it would appear that "student decisions to enroll in college respond positively, and nontrivially, to both price cuts and aid increases" and that "decisions about where to attend school also respond nontrivially to changes in the relative prices of schooling alternatives."[17] However, beyond this it is difficult to be more precise. This is problematic for designing policy. To the extent that the existing tuition and financial aid regime in California fails to provide opportunities for some or all students to attend their institution of choice, policy adjustments are needed to change the mix of students within or between sectoral segments. This objective is further underscored by "Tidal Wave II." If enrollment pro-

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[12]Charles Manski and David Wise (*College Choice in America*, Cambridge, MA: Harvard University Press, 1983) concluded that (depending on the program year being analyzed) 25-39% of federal grant aid recipients would not have been enrolled without aid. Their conclusions are based on 1970's NLS data.

[13] Leslie and Brinkman, *The Economic Value*, p. 139.

[14]The best known of these studies is by W. L. Hansen, "Impact of Student Aid on Access," in J. Froomkin (ed.), *The Crises in Higher Education* (New York: Academy of Political Science, 1983). This study claimed to find no effects on participation as a result of federal programs. However, a refined version of this type of study by McPherson and Schapiro (in *Keeping College Affordable*) shows that Federal aid did have the expected effects.

[15]Some evidence on the importance of competitive aid offers is provided by a University of California phone survey of a small number of nonmatriculants in fall 1993. Financial reasons were most commonly cited for why students had not enrolled, and inadequate financial aid packages were clearly a factor. More than half had enrolled at institutions where they received a more lucrative financial aid offer. See *The Reasons Fall 1993 SAA Freshmen Applicants Did Not Accept the University Offer of Admission: The Results of an Exploratory Survey*, Oakland: University of California, Office of the President, March 1994.

[16] Leslie and Brinkman, *The Economic Value*.

[17] McPherson and Schapiro, *Keeping College Affordable*.

jections[18] are to be believed, the higher education system as a whole in California will need a way to manage a large increase in enrollment. Changes to financial aid and tuition policy may be one tool for doing so.

Consider the kinds of information that would be needed in changing policy on the levels or types of financial aid and tuition in California. It may be possible to very crudely predict what would happen to enrollment in higher education if grant aid were increased by 10%. But does estimated responsiveness apply to California and to Maine and to Louisiana? Does it matter if it is federal aid or state aid that is raised? There have been few attempts to examine state data to determine if there are differences in behavior across states. How would a uniform change affect the pattern of enrollment across types of institutions? On this point the literature is almost silent. There have been very few attempts to estimate cross-price elasticities.[19] There is some evidence that two-year college students are more responsive to changes in net price than are four-year students; in part this is attributable to the fact that community colleges tend to enroll a higher fraction of lower-income students. Finally, an important component of policy towards higher education in California is ensuring not only that all academically eligible students can attend postsecondary schooling, but that these opportunities are open to students of all racial and ethnic backgrounds and regardless of immigrant status. While a few studies have attempted to determine if black and white students respond differently to tuition and aid, there are virtually no estimates for Hispanic and Asian students, who together make up a significant fraction of all students in California higher education.

Hence, while it is possible to examine structural features of the tuition/fee and financial aid setup in California higher education, and to make judgments about the effectiveness of that system in meeting its goals, any rigorous analysis of the policy alternatives would require a great deal more information than is currently available. Tuition and aid responses of different types of students and between segments would be critical in determining the likely impact of policy changes, but such information is simply unavailable. The necessary parameters could probably be inferred from existing California data, although the modeling difficulties are significant. In the absence of such an analysis, one might want to look in detail at states pursuing higher education pricing policies considerably different from those of California. Both these options would require a major research effort.

OVERVIEW OF CALIFORNIA TUITION/FEES AND FINANCIAL AID

The state of California supports a large system of public higher education: the University of California (UC), the California State University (CSU), and the California Community Colleges (CCC)

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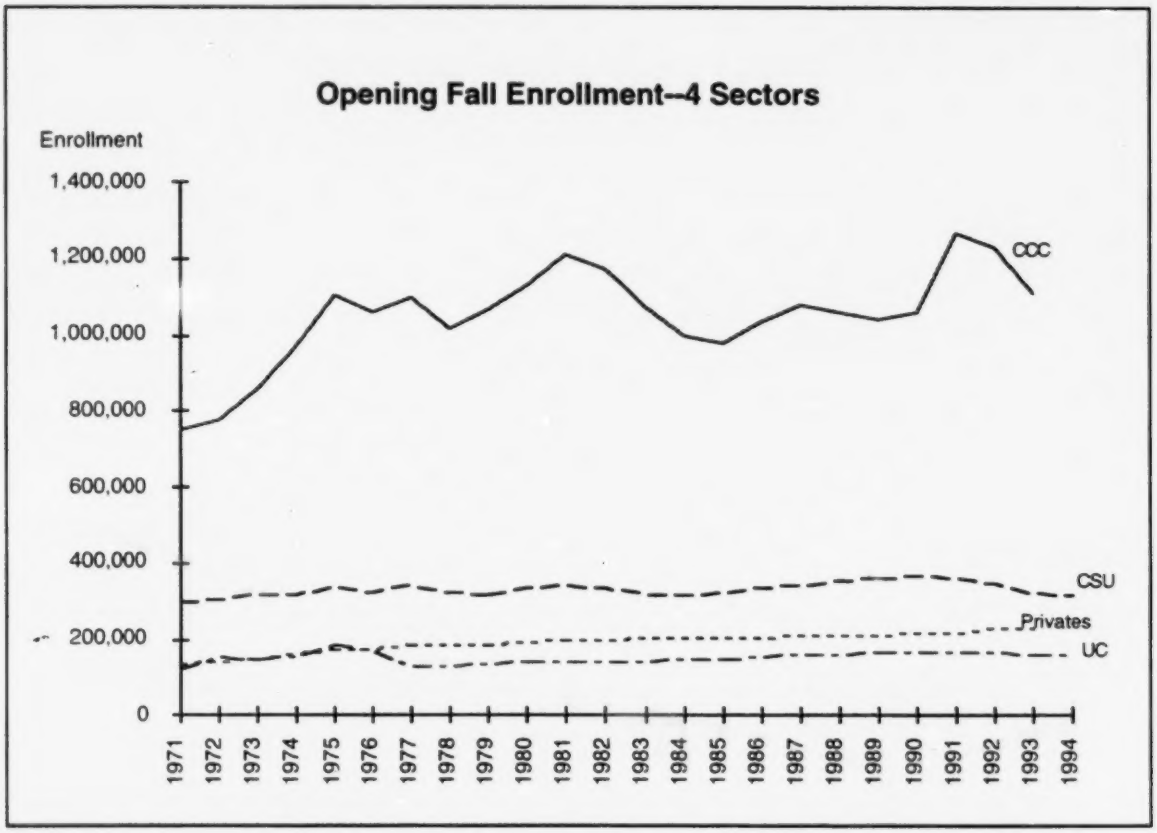
[18]See, for example, *A Capacity for Growth*, Sacramento: California Postsecondary Education Commission, August 1995; David Breneman, Leobardo Estarada, and Gerald C. Hayward, *Tidal Wave II: An Evaluation of Enrollment Projections for California Higher Education*, San Jose: California Higher Education Policy Center, September 1995; Michael A. Shires, *The Future of Public Undergraduate Education in California*, MR-561-LE, Santa Monica, CA: RAND.

[19]A useful recent attempt is Thomas Kane, "Rising Public College Tuition and College Entry: How well Do Public Subsidies Promote Access to College," National Bureau of Economic Research Working Paper No. 5164, July 1995.

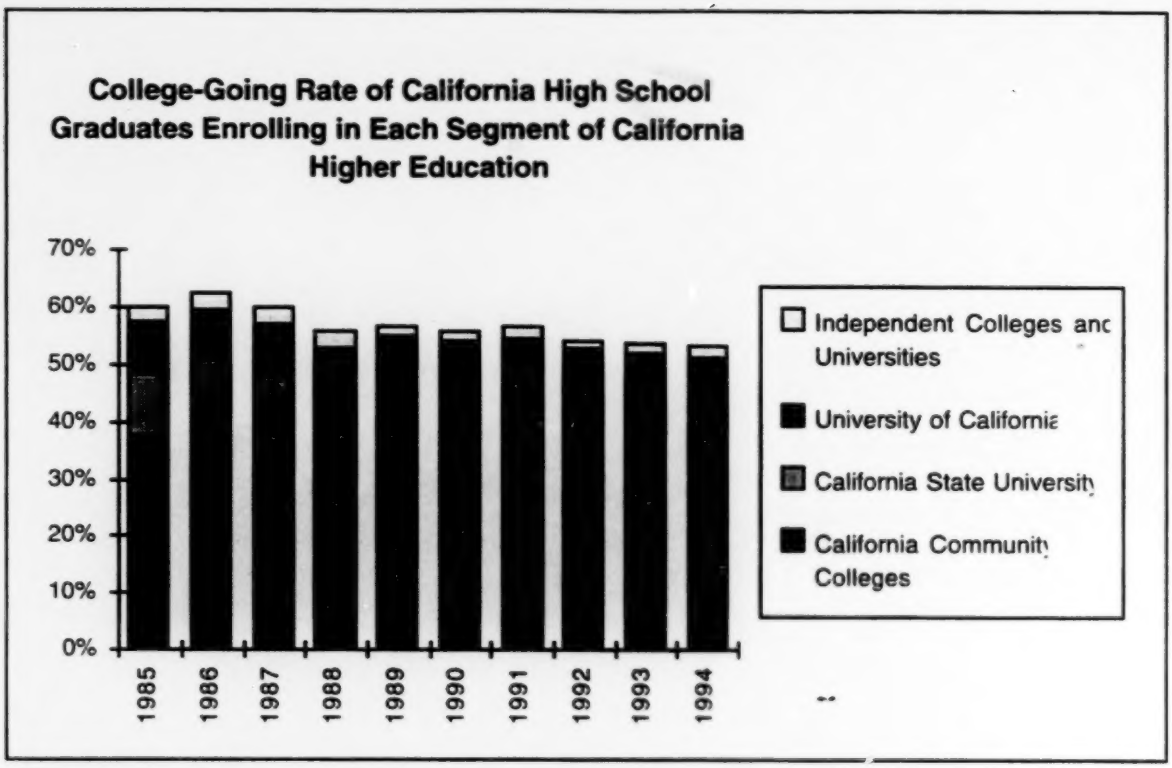
enroll some 1.6 million students per year. In addition, more than 100 private colleges and universities (ICU) enroll more than 200,000 students. Figure 1 shows enrollment trends for each of these sectors over the past quarter century. At peak, over 60% of California high school graduates enrolled in a higher education institution.

Figure 2 shows that the vast majority of these students attend a community college. The independent sector has historically been relatively small in terms of the total number of students enrolled. Compared to that of other states, this total enrollment represents one of the highest fractions of college-age population enrolled in all higher education, and one of the highest proportions of total students attending public institutions. The state has supported this system through large public subsidies and a policy of providing sufficient general fund state dollars to keep tuition and fees at relatively low levels. The state spends an estimated $5 billion a year on higher education.



SOURCE National Center for Education Statistics; California Postsecondary Education Commission

Figure 1



SOURCE: California Postsecondary Education Commission

Figure 2

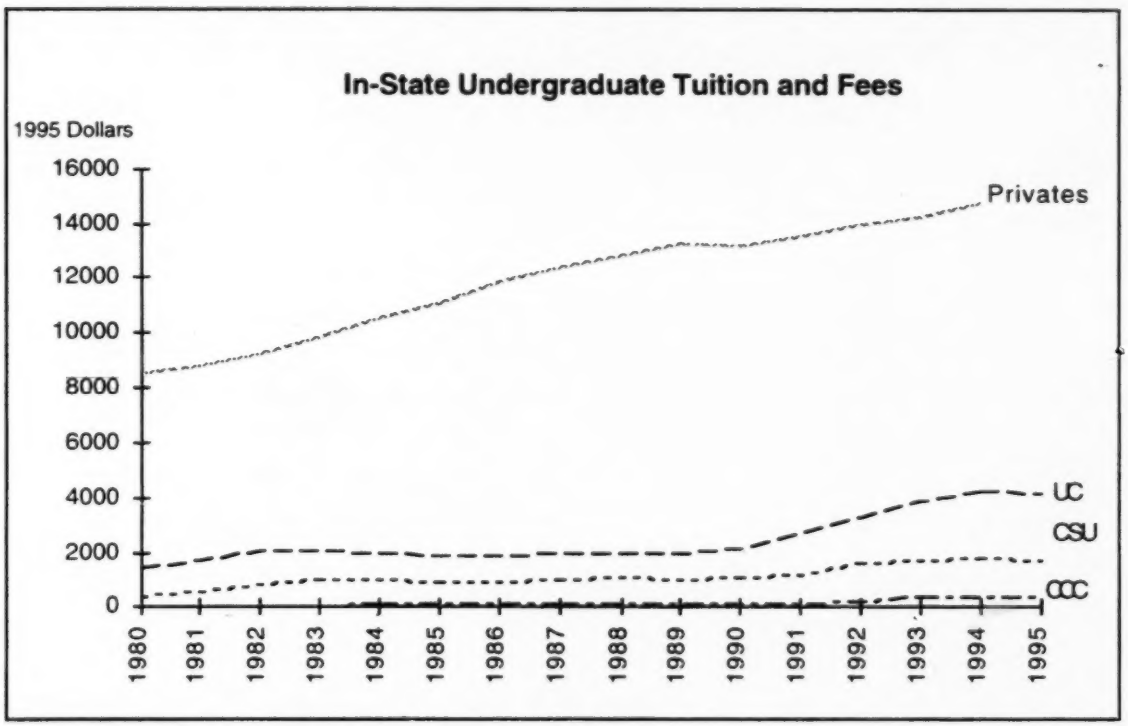
Why has the state maintained this huge investment in public higher education? Clearly, college pays off for individuals in terms of additional earnings and career mobility,[20] both of which benefit the state through higher tax revenues. The state also benefits from having a more educated population in terms of crime, health, and quality of life. Many believe that California's economic growth over the post-war period is in part attributable to widespread, high-quality higher education. In recent years, however, with increasing fiscal pressure on the state (and perhaps signs of public discontent with higher education), this commitment has been under pressure.

[20]That additional years of schooling pay off for individuals has been substantiated by numerous economic studies. There is also considerable evidence that the labor market premium to college attendance rose in the 1980s. For citations see Dominic Brewer, Eric Eide, and Ronald G. Ehrenberg, "Does it Pay to Attend an Elite Private College? Cross Cohort Evidence on the Effects of College Quality on Earnings," National Bureau of Economic Research Working Paper No. 5613, June 1996.

Tuition/Fees

Historically (since the Master Plan of 1960)[21] the state of California has heavily subsidized its three systems of public higher education. Tuition is formally capped at negligible amounts by state law; students instead pay a wide range of "fees" ostensibly for specific student services but which to all intents and purposes amount to tuition. As Figure 3 shows, fees/tuition have been very low: UC fees averaged under $2,000 per year and CSU fees averaged under $1,000 in 1995 dollars until 1990, and charges were not imposed on CCC students until the early 1980s. From 1990 to 1995, charges at public institutions rose rapidly. After decades of a widening in the cost differential between independent institutions and the publics, the trend has been reversed. The difference in tuition/fees between the public segments has grown in absolute terms but not in relative terms.

A notable feature of this time trend in the publics is that it is not a gradual or continuous increase: fees tend to jump around. This is illustrated by examining the percentage change in fees (see Figure 4). This large year-to-year change in the rate of increase in fees results from the fee-setting process, which is heavily politicized.[22]

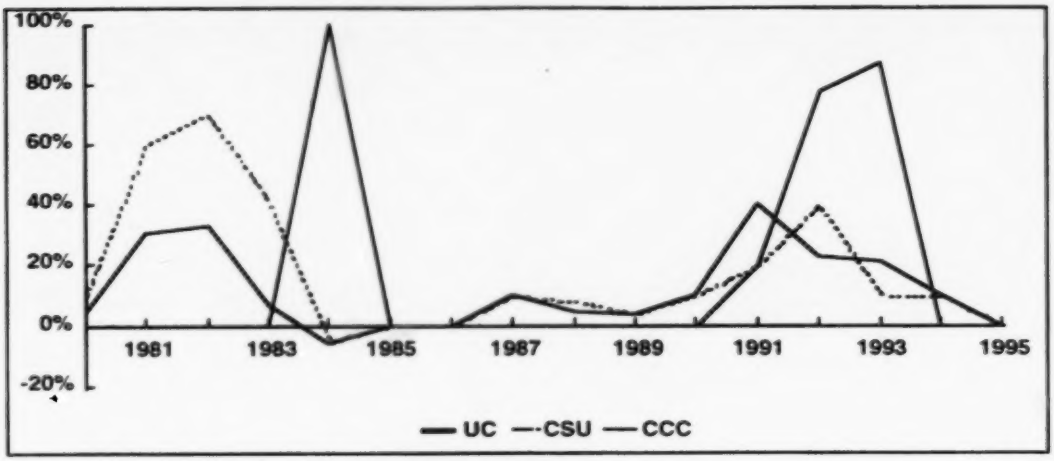


SOURCE: California Postsecondary Education Commission

Figure 3

[21] *A Master Plan for Higher Education in California, 1960-1975*, Sacramento: California State Department of Education, 1960.

[22] California Higher Education Policy Center, *Shared Responsibility*.



SOURCE: California Higher Education Policy Center

Figure 4. Percentage Increases in Student Fees, 1980-1995

Until recently, tuition/fees at California's public institutions have been among the lowest in the nation. According to recent GAO figures, the state remains a low-tuition state.[23] Expressing average tuition at four-year public colleges as a percentage of median household income, California is right in the middle (25 of the 50 states—see Table 1). Many major states continue to have higher tuition levels, however (for example, Maryland, Michigan, New York, and Illinois). Figure 5, which compares UC and CSU with public institutions in neighboring western states (Oregon, Washington, Arizona, and Nevada), shows that tuition/fees have risen rapidly in most public systems, but faster in UC and CSU since 1990. However, CSU remains among the lowest cost four-year public institutions for students in the western United States. Even with recent hikes, community colleges in California are by far the cheapest of any in the nation; the closest state in terms of cost is Hawaii, which is twice as expensive; the national average in-state tuition at community colleges is *five times* that of California.[24]

Federal Aid, Cal Grants, and Institutional Aid[25]

Students attending most institutions of higher education in California are eligible to receive a myriad of federal, state, institutional, and private aid that in some way helps reduce the costs of

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[23]General Accounting Office, *States' Average College Tuition*, September 1996, published in *Education Daily*, September 20, 1996, p. 4.

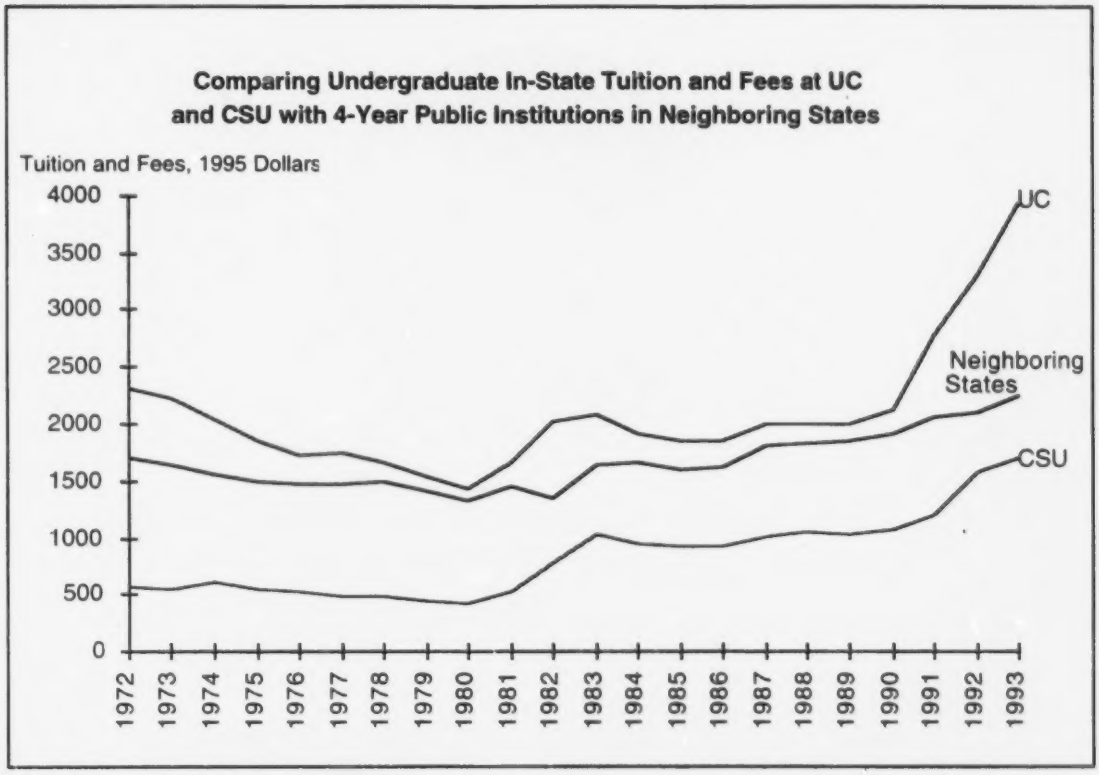
[24]*National Profile of Community Colleges: Trends and Statistics, 1995-6*, Washington, D.C.; American Association of Community Colleges, Table 4.2, p. 49.

[25]For a national summary of financial aid trends, see the College Board's *Trends in Student Aid 1963-1983*, by Donald A. Gillespie and Nancy Carlson, December 1983, and *Update 1985 to 1995*, September 1995. For a useful summary of trends in California see Gladieux and King, *Trends in Student Aid: California*.

Table 1
State Tuition at Four-Year Public Colleges Compared to Incomes

Rank	State	Tuition as a Percentage of Income	Rank	State	Tuition as a Percent age of Income
1	Hawaii	3.61	26	Louisiana	8.33
2	Nevada	5.10	27	West Virginia	8.45
3	North Carolina	5.39	28	Montana	8.49
4	Idaho	5.44	29	South Dakota	8.57
5	Alaska	5.52	30	New Jersey	9.10
6	Utah	5.62	31	Maryland	9.11
7	Texas	5.96	32	Minnesota	9.24
8	Wyoming	6.05	33	Connecticut	9.31
9	Florida	6.11	34	Mississippi	9.62
10	Arizona	6.21	35	Illinois	9.66
11	Oklahoma	6.45	36	Missouri	9.96
12	Colorado	6.50	37	Oregon	10.30
13	Georgia	6.60	38	Massachusetts	10.31
14	Tennessee	6.99	39	South Carolina	10.40
15	New Mexico	7.20	40	Virginia	10.53
16	Nebraska	7.22	41	Michigan	10.74
17	Wisconsin	7.22	42	Indiana	10.91
18	Kansas	7.45	43	Delaware	11.04
19	Iowa	7.75	44	Rhode Island	11.33
20	North Dakota	7.82	45	Ohio	11.50
21	Arkansas	8.07	46	New York	11.59
22	Kentucky	8.12	47	Maine	11.75
23	Washington	8.13	48	New Hampshire	12.87
24	Alabama	8.21	49	Pennsylvania	14.64
25	California	8.26	50	Vermont	15.42
	Nationwide	**8.88**			

SOURCE: General Accounting Office, *States' Average College Tuition*, September 1996, reported in Education Daily, September 20, 1996, p. 4.



SOURCE: California Postsecondary Education Commission; National Center for Education Statistics

Figure 5

college.[26] Forms of aid vary from grants or gifts that do not have to be repaid, to work study, to loans. Nationally, students received an estimated $46,826,000,000 in 1994/5. Seventy-five percent was from federal sources, and state programs made up just 6% of the total. Figure 6 shows the sources and types of aid at the national level.

Many forms of aid are designed to enable economically disadvantaged students to attend college; such "need-based" aid is given on the basis of family economic circumstance. While the rules and formulas vary for each type of aid, the system works such that institutions package aid for students by beginning with federal aid, adding any state program aid, and then supplementing it with institutional resources. (Students may supplement this with aid from private sources.) The composition of aid packages may be very complex; and institutions use aid strategically in order to encourage students to attend their institution. Table 2 shows aid for each type of institution in California by source.

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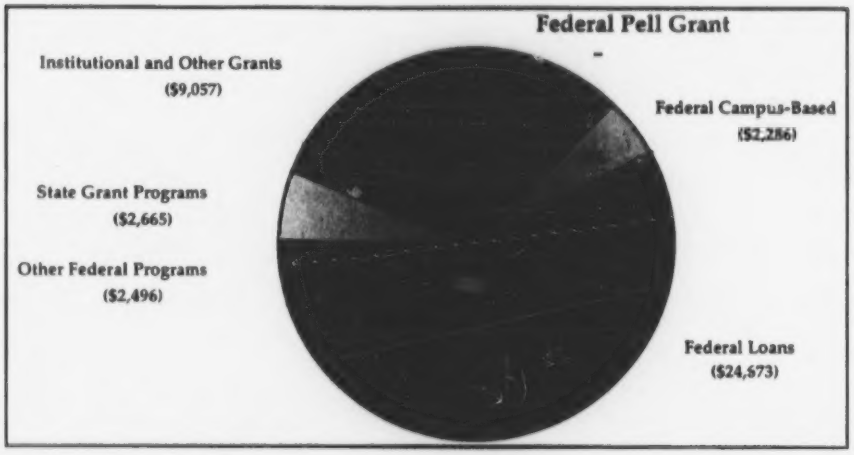
[26]We do not focus here on the specifics of program eligibility and award determination. Developing a detailed financial aid policy for the state would, however, require careful attention to the interaction of different grant aid, work study, and loan programs. Stephen Klein et al., in "The Policy Implications of Interactions Among Financial Aid Programs," *Journal of Student Financial Aid*, 25(1), Winter 1995, analyze program rules for various types of aid available to students in Indiana and conclude that "the formulas employed by [these] programs interacted in ways that distorted, or even canceled out, their implicit targeting objectives."



SOURCE: The College Board

Figure 6. National Estimated Student Aid by Source for Academic year 1994/95 (Current Dollars in Millions)

Federal Aid Programs

Federal programs are anchored by Pell Grants, which in 1995/6 ranged from $400 to $2,340 a year, with the Federal Supplemental Education Opportunity Grant (FSEOG) providing an additional $100 to $4,000 a year (with priority given to those with Pell eligibility).[27] These grant programs focus primarily on very low income students. Over the past decade, the maximum Pell Grant as a share of the cost of attendance has fallen continually. For example, in 1985 the maximum Pell Grant was 70% of the cost of attending a public two-year college; by 1994 it was barely more than 50%. For public four-year schools, it fell from around 60% to under 40%.[28] As Table 2 shows, most Pell recipients were in proprietary institutions and CCC; fewer students at UC or the independents got Pells.[29] However, roughly 61% of undergraduate, need-based financial aid recipients received Pell Grants at UC, 70% at CSU, and up to 34% at CCC, as well as an estimated 21,000 students at independent colleges.[30] These grants are supplemented by a federal work study program, which provides the institution funds to pay students who work on campus each week while engaged in full-time study.

About half of all federal aid is in the form of loans. The system is complex, the product of numerous changed and added programs. Perkins loans provide money at a very low interest rate (5%)

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[27] Brief descriptions of the aid programs may be found on the Worldwide Web site of the California State Aid Commission (CSAC) (www.csac.ca.gov). A useful appendix is also found in *Student Aid for Access: Financial Aid Status Report, 1993-4*, Long Beach: California State University.

[28] *Trends in Student Aid 1988 to 1995*, Figure 3, p. 11.

[29] An important issue for the design of federal grant aid is who should receive it. Most programs are designed for traditional-age college students. However, a large fraction of community college students receiving Pells are students in remedial programs, vocational programs, and ESL courses. See *The Impact of Financial Aid Policy Changes on Community College Students*, Washington, D.C:. Association of Community College Trustees, February 1995.

[30] Personal correspondence from CSU Access and Retention Office.

Table 2
Aid Awarded to Students at Public California Institutions, by Segment, in Current Dollars (1993-94)

	All Public Institutions	UC	CSU	CCC	Independent Nonprofit Institutions	Proprietary & Specialty Insitutions
Federally Supported Programs						
Pell Grants	392,775	56,382	117,118	219,275	35,851	212,118
SEOG	31,136	7,769	9,232	14,135	13,491	11,700
CWS	38,862	13,864	11,599	13,399	14,888	4,003
Perkins Loans	40,487	23,166	15,010	2,311	25,952	3,329
SSIG	7,151	4,339	2,056	756	3,603	432
Subsidized Stafford Loans	523,710	211,573	252,688	59,449	384,164	125,415
Unsubsidized Stafford Loans	47,372	17,357	26,510	3,505	61,530	9,390
SLS	42,483	29,147	10,150	3,186	191,771	110,894
PLUS	20,135	15,670	4,220	245	25,973	17,377
Other Grants	32,499	30,905	1,183	411	1,094	0
Other Loans	4,734	4,212	235	287	--	--
Total Federal Aid	1,181,344	414,384	450,001	316,959	758,317	494,658
State-Administered Programs						
Cal Grant A	69,351	56,464	12,887	0	60,738	5,235
Cal Grant B	55,451	23,731	21,434	10,286	7,753	1,071
Cal Grant C	468	0	0	468	147	994
Other Grants/Loans	913	816	94	3	1,376	0
Work Study	700	248	253	199	90	51
Total State Aid	126,883	81,259	34,668	10,956	70,104	7,351
Institution-Based Aid						
Undergraduate Grants/Scholarships	--	113,017	--	--	--	--
Graduate Grants/Fellowships	--	103,480	--	--	--	--
State University Grants	--	--	79,696	--	--	--
Educational Opportunity Program	--	--	14,429	--	--	--
Board of Governors Grants	--	--	--	77,319	--	--
Extended OP/Services	--	--	--	6,884	--	--
Other Grants/Scholarships/Fellowships	418,254	--	19,202	4,227	--	--
Loans	7,105	5,963	296	846	--	--
Work Study	3,511	2,174	--	1,337	--	--
Total Institution-Based Aid	428,870	224,634	113,623	90,613	403,302	--
Total Federal, State, and Institution-Based Aid	1,737,097	720,277	598,292	418,528	1,231,723	502,009

for needy students, with no interest paid while the student attends school at least half time. Repayment begins nine months after graduation, with up to 10 years to repay. There are annual and cumulative loan limits ($3,000 for undergraduates and $5,000 for graduates annually in 1995, with aggregate limits of $15,000 and $30,000). The Federal Family Education Loan Program (FFELP) provides the same type of loans. Other programs include subsidized Stafford loans, which are low variable-interest rate loans available to all types of students with demonstrated financial need. Again, no repayment is required while in school, and repayment begins six months after termination of a college program. Borrowing is not to exceed $23,000 for undergraduates, $65,000 for graduates. Unsubsidized Stafford loans are available to those who do not qualify for other need-based financial assistance, including high- and middle-income families. Beginning in 1994/5, the Ford Federal Direct Student Loan Program, almost identical to the Stafford program, allowed students to borrow directly from the U.S. Department of Education, which transfers funds to the student's college. Federal Parent Loans for Undergraduate Students (PLUS) enable parents with a good credit history to borrow up to the total cost of their dependent children's education less other aid. Several of these programs are administered in the state by the California Student Aid Commission (CSAC).

State Aid Programs

California residents attending a California higher education institution are eligible for state aid. Residents attending schools outside of the state do not qualify; neither do residents of other states who choose to attend a California school. This is in line with the policy of almost all other states; only Pennsylvania, New Hampshire, Rhode Island, and Vermont fund students at out-of state institutions in any sizable number.[31] Students may receive a Cal Grant A, B, or C from CSAC. Cal Grant A's are designed to help middle- and low-income students with tuition/fee costs; eligibility is determined by financial need and a minimum GPA cutoff (hence there is a merit-based element). The maximum award in 1995/6 was $5,250 at independent institutions, $3,799 at UC, and $1,584 at CSU. Those qualifying for a Cal Grant A but attending a community college have their awards reserved until they transfer to a four-year institution.

Cal Grant B's provide a basic living allowance of up to $1,410 (1995/96) for very low income students, with tuition/fee allowances identical to those in Cal Grant A. More than half of all new recipients *must* attend a community college (there are also 250 special grants awarded to CCC students transferring to four-year schools). Awards for freshmen are limited to living expenses; when renewed by sophomores, juniors, or seniors, the grant may also cover all or part of tuition/fees. Cal Grant C's help vocational school students in 4- to 24-month programs with tuition and training costs. In 1995/6, the maxi-

[31]Seven percent of all awards (2% of aid dollars) went to Pennsylvania students at out-of state institutions in 1994/5. The figures were 27% (25%) for New Hampshire, 27% (28%) for Rhode Island, and 40% (34%) for Vermont. See Table Six in *NASSGAP 26th Annual Survey Report, 1994/5 Academic Year*, National Association of State Student Grant and Aid Programs, February 1996.

mum award was $2,890. In addition, there is a small state work study program available to students at public institutions only. Cal Grants are funded by state general fund revenues, and the number of awards and the maximum award are set each year in legislation.

State aid, while a relatively small part of the financial aid available when considering the totality of aid for California students, is still significant: over 90,000 students received Cal Grants in 1995. The number of recipients, total award amounts, and average award by type of Cal Grant and institution type are shown in Table 3. The vast majority of Cal Grant awards were made to independent students or dependent students from families with incomes less than $24,000. The number of Cal Grants awarded is far below the number of eligible students. For 1995/6, for example, 136,673 new applicants were eligible (i.e., they were eligible for at least one of the three Cal Grant programs and had met minimum financial need criteria and income and asset ceilings), but only 31,220 grants were available, which amounts to 22.28% of the eligible pool.[32]

Slightly under a third of all Cal Grants are awarded to students attending UC. In addition, UC students receive the majority of total Cal Grant dollars, although the independent institutions also receive a significant fraction (students at both UC and independent institutions primarily receive Cal Grant A dollars). Until relatively recently, students at independent institutions received most Cal Grant dollars, more than any other segment. While there are fewer Cal Grant recipients at independent institutions, the awards that go to these students are larger than those that go to students in the other systems. As Figure 7 shows, there has been a steady decline in the proportion of Cal Grant dollars awarded to independent institutions. This trend has arisen because of the introduction of fees into public institutions and the fact that the maximum Cal Grant that can be awarded at independents has not been raised for several years.[33] Cal Grants were originally conceived as a program to facilitate student attendance at independent institutions in the state. However, as fees have grown at UC and CSU, these institutions have taken an ever larger share of Cal Grant dollars and of recipients, effectively transforming the nature of the program. Further, given the relatively low ratio of actual to eligible recipients, the program has essentially become an extension of federal need-based programs assisting financially needy students.

Real funding for the Cal Grant program has fluctuated somewhat from year to year, although there has been moderate growth over time. The average annual real growth in state need-based aid has been around 5% since 1985. Over the same period, tuition and fees have risen more rapidly. Figure 8 shows that since 1990, state aid has failed to keep pace with rising student costs at public institutions in the state. Referring back to Figure 3, it can be seen that at the same time tuition and fees have been increasing in the public sector, they have also been increasing at independent institutions. While in-state fees at the public higher education systems rose more rapidly than tuition and fees at the private institutions in the 1990s, the gap between public and private tuition and fees has widened since 1980.

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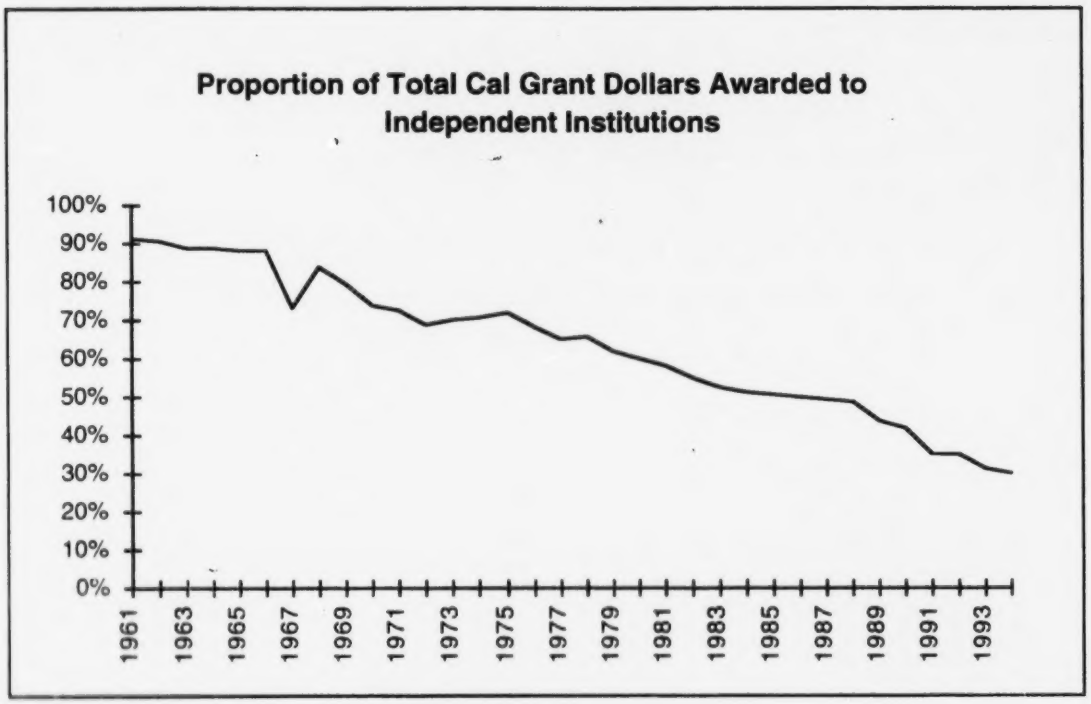
[32] *Grant Program Statistics 1995-6*, Sacramento: California Student Aid Commission, p. 1.

[33] The amount was raised in 1996/97 from $5,250 to $7,200.

Table 3
Grant Recipients, Total Award Amounts, and Average Awards by Program and Segment

Program	Segment	CCC	UC	CSU	ICU	Propietary / Other	All Segments
Cal Grant A	Number of recipients	0	23,675	13,221	15,329	1,450	53,675
	Total award amounts	$0	$89,313,974	$20,801,984	$81,502,759	$9,450,793	$210,069,510
	Aaverage award	$0	$3,663	$1,573	$5,317	$6,518	$3,746
Cal Grant B	Number of recipients	20,486	7,404	9,816	1,532	317	39,555
	Total award amounts	$28,745,790	$32,075,437	$25,656,164	$8,329,240	$1,802,675	$96,609,306
	Average award	$1,403	$4,332	$2,614	$5,437	$5,687	$2,442
Cal Grant C	Number of recipients	2,008	4	0	227	359	2,598
	Total award amounts	$1,064,240	$16,281	$0	$846,989	$1,349,425	$3,276,935
	Average award	$530	$4,070	$0	$3,731	$3,759	$1,261
Graduate Fellowship	Number of recipients	0	185	206	359	14	764
	Total award amounts	$0	$321,096	$181,692	$2,354,287	$23,366	$2,880,441
	Average award	$0	$1,736	$882	$6,558	$1,669	$3,770
Cal Grants & Graduate Fellowships	Number of recipients	22,494	31,268	23,243	17,447	2,140	96,592
	Total award amounts	$29,810,030	$121,726,788	$46,639,840	$93,033,275	$12,626,259	$303,836,192
	Average award	$1,325	$3,893	$2,007	$5,332	$5,900	$3,146

SOURCE: Grant Program Statistics 1995-96, California Student Aid Commission, p. 7.



SOURCE: California Higher Education Policy Center

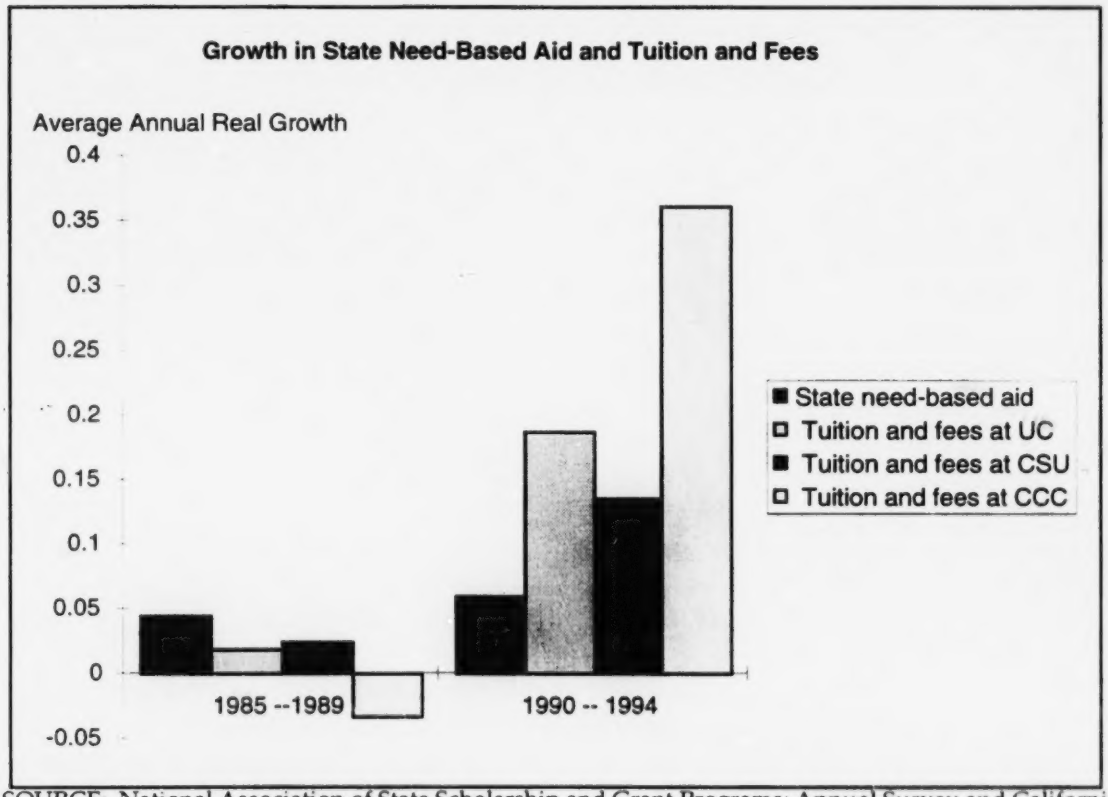
Figure 7

How does California compare to other states? Almost all states have some form of need-based financial aid for undergraduates, but they vary widely in their levels of funding. California rates 16th in terms of estimated grant dollars per resident population (1994/5) in need-based aid to undergraduates, 11th in all grant aid. If grant dollars are expressed in terms of per-resident college-age population, California fares about the same (16th and 9th for need-based undergraduate aid and all grant aid, respectively). If grant dollars are expressed per full-time undergraduate enrollment, the Golden state is 14th and 19th respectively; in terms of the percentage of full-time undergraduates receiving grant awards, it is 31st and 34th.[34]

Institutional Aid Programs

Until recently, institutional aid was a relatively minor part of most public institutions' student financial aid packages; in contrast, it has always made up the bulk of aid for those attending independent institutions. The types of aid available vary widely by school depending on the school's resources. For the three public systems, most institutional aid is given through the programs described in the following

[34] *NASSGAP 26th Annual Survey Report*, Tables 9-12.



SOURCE: National Association of State Scholarship and Grant Programs; Annual Survey and California Postsecondary Education Commission

Figure 8

paragraphs.[35] Educational Opportunity Programs (EOP) at both UC and CSU and Extended Opportunity Programs and Services (EOPS) at the CCC provide grants to low-income disadvantaged students.

CCC students may receive fee waivers ("Board of Governors Enrollment Fee Waiver") based on financial need. In 1994/5, 459,000 students received such waivers, valued at $89 million (though there is no direct appropriation for the program).[36] The CCC estimate that as many as 60% of all students may be eligible for such waivers but that only around a third apply for them.[37] Other than Pell Grants, these waivers represent the biggest single source of aid for CCC students. The CCC also awarded slightly more than 4,000 institutional scholarships at a cost of just over $2 million.

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[35]There are also numerous specialized programs that we do not note because they cover a relatively small number of students and tend to have specialized purposes. For example, CSU awards Claudia Hampton Scholarships to high school students from the Los Angeles area, Scholarships for Future Scholars for disadvantaged students, and graduate equity fellowships for those from groups underrepresented in their field of study.

[36]*Financial Aid Programs for California Community College Students, 1994-5*. Sacramento: California Community Colleges, March 1996.

[37]Jack McCurdy, *Broken Promises: The Impact of Budget Cuts and Fee Increases on the California Community Colleges*, San Jose: California Higher Education Policy Center, 1994.

At CSU, needy students not covered by a Cal Grant may receive a State University Grant (SUG) up to the full amount of systemwide fees ($1,584). There were 82,484 such awards in 1994/5, with aid totaling almost $95 million.[38] Again, other than Pell Grants or federal loans, SUGs represent the major source of aid for CSU students. Various other programs increased the total amount of institutional aid to over $109 million in 1994/45.

At UC, there are several institutionally based aid programs. By far the largest is the University Student Aid Program (USAP), which provides need-based grants, loans, and work study to both undergraduate and graduate students. Additional programs include the Regents Scholarships, awarded on the basis of outstanding academic achievement, and the President's Undergraduate Fellowships, which are for specialized research projects. In total, UC provided over $235 million in institution-funded programs to undergraduate and graduate students in 1994/5 (excluding teaching and research assistantships).[39] This total included over 38,000 undergraduate grants valued at $102 million and almost 24,000 undergraduate and graduate fellowships costing $104 million.

DOES THE CURRENT SYSTEM OF TUITION/FEES AND FINANCIAL AID WORK?

The preceding overview of the system of tuition/fees and financial aid in California reveals a number of important trends. The historical structure of low fees at public institutions (designed to promote widespread access), accompanied by a modest state system of financial aid to facilitate attendance at higher-cost independent institutions, has been increasingly under strain. The past decade has seen unprecedented fee hikes at public institutions, declining real federal grants, and increasing competitiveness for state-funded grants. Financial aid has not kept pace with increases in student costs; more students are utilizing loans to finance college. There has been a decline in the proportion of Cal Grant dollars spent on students attending independent institutions, and there have been increases in institutionally funded aid in all segments, much of it financed by higher tuition/fees on all students.

The major focus of attention in recent years has been rising fees in public institutions. When aid and tuition/fee changes are taken together, have the costs of obtaining higher education in California risen? Data from the latest *Student Expenses and Resources Survey* (SEARS) conducted by CSAC suggest that when all costs[40] and financial aid are factored into the estimates, there has been an increase in college costs for students (see Figure 9). While there is an upward trend, it is not as dramatic as one might believe from the widespread concern expressed over tuition/fee hikes.[41] This is because institutionally

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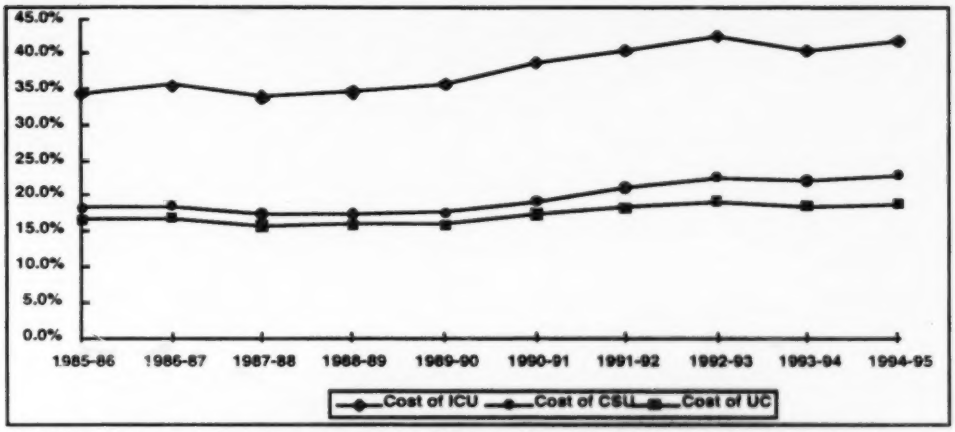
[38] *Financial Aid Status Report*, Long Beach: CSU, Appendix A, Table 11.

[39] *Report of Student Financial Support, 1994-5*, Oakland: University of California, Attachment D. Personal correspondence from CSU Access and Retention Office.

[40] For individual students, by far the largest costs of college attendance are foregone earnings. These are not, of course, included in any cost estimates shown here. However, the SEARS data do take into account most of the estimated costs associated with attending a school, such as transportation, books, and supplies, as well as subsistence costs.

[41] *Family Financial Resources of Dependent Undergraduates at California Four-Year Institutions: Preliminary Findings from the 1994-5 Student Expenses and Resources Survey*, draft, Sacramento: California Student Aid Commission, March 1996.



SOURCE: Family Financial Resources of Dependent Undergraduates at California Four-Year Institutions, California Student Aid Commission, March 1, 1996, p. 7.

Figure 9. Cost of Education Compared to Median Family Income

based sources of aid have to a large extent made up for rising tuition/fees. Unfortunately, the CCC did not participate in SEARS, so there are no available data on costs for them.

How have these changes in costs affected access to higher education in California? The Master Plan set an extremely high goal for the state: basically any student who was academically qualified could attend UC or CSU, and the CCC were to have open access. As has been mentioned, state financial aid was originally conceived as a way of providing students with the option of choosing to attend an independent institution. Access to postsecondary schooling was in principle guaranteed by zero or very low tuition/fees; aid was primarily a tool to promote choice and ensure access for the very poorest. As soon as the negligible tuition/fee policy was abandoned, the system's coherence was lost. For example, fees have been set on an ad hoc basis, jumping around unpredictably from year to year and having little rational economic basis (tied to institutional costs, for instance) save to make up shortfalls in state general fund revenues given to the systems. Fees were originally a means of coping with escalating instructional and student services costs, but were—and remain—far below the actual costs of instruction, so that all students continue to receive a sizable subsidy. Current educational costs combined with population and state economic trends may make this high level of subsidy unsustainable.

Even with a completely free system of higher education, some students will be "priced out" of these educational opportunities by the other costs associated with college. Once tuition and fees are imposed, it is likely that more students will be "denied" a place in college. Financial aid geared toward covering these fees and subsistence can in principle reduce the number denied access, and the academic literature suggests that to some extent federal aid policies successfully do this. Although we cannot be certain, it is likely that state financial aid has had similar effects. The intent of tuition and financial aid

policy is still, therefore, to "be sure no eligible student is denied education opportunity [at the University] due to inability to pay."[42]

Has the system of low tuition and fees facilitated access historically in California? In terms of overall participation in higher education, California has supported relatively high rates of college attendance. This is particularly true of community colleges in California, which enroll a higher percentage of the state population age 18 or over than do the community colleges in all but two other states.[43]

Have the recent increases in fees jeopardized this access? Clearly enrollment is influenced by a variety of factors, including the net price of college (tuition and fees plus other school-related costs, less financial aid), labor market conditions, and overall population trends. Without formal econometric modeling, it is impossible to ascertain the impact of net price on enrollment in California institutions. Plots showing long-term enrollment trends and tuition/fees are informative, however. We provide such plots in Figures 10 through 13.

Two features emerge most strongly from the data. First, enrollment at UC and the independent colleges appears relatively insensitive to tuition changes. Second, CSU and CCC enrollment has changed sharply and negatively in the 1990s, a period of rapid fee increases.[44] While causality cannot be inferred, these trends are consistent with the academic literature on tuition responsiveness, which generally finds that lower-income students respond more than middle-income students (who in turn respond more than high-income students). These trends also suggest perhaps that even though institutions made up much of the difference in increased costs through financial aid, publicly announced large tuition increases had a large impact.[45] This has important implications for possible policy changes, such as a move to a "high tuition, high aid" policy.

Whether the current level of tuition/fees and/or net costs implies that access is threatened is more difficult to assess. As noted, any nonzero tuition policy implies that some students will be priced out of college in the absence of effectively targeted financial aid. Recent changes most likely make the extent to which public institutions live up to the Master Plan's lofty goals more tenuous. The CCC certainly claim that the current level of enrollment "violates the Master Plan's intent."[46]

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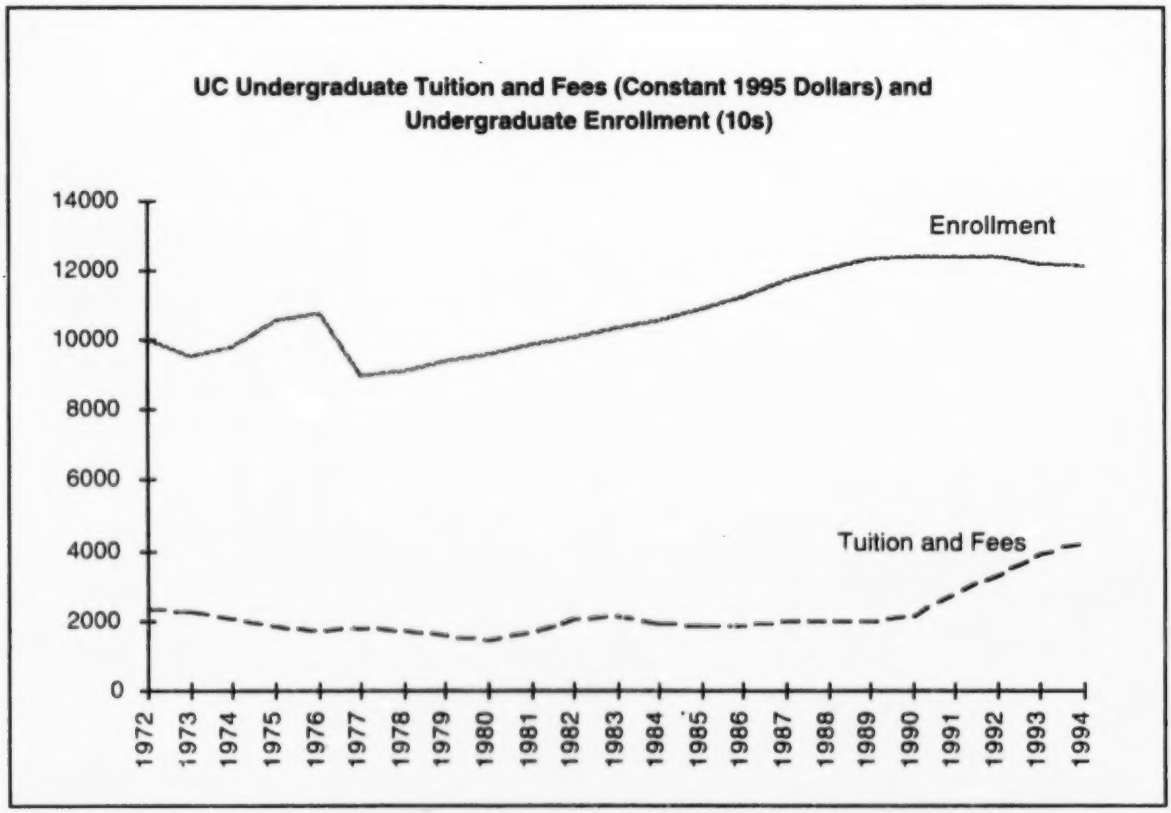
[42]Agenda for Special Meeting of May 17, 1995, at University of California, Committee on Educational Policy, *Anticipating Enrollment Growth: How Much? How Soon?*

[43]Table 1.3, *National Profile of Community Colleges*. Arizona and Wyoming are the two states with higher participation rates.

[44]CCC actually have an enrollment forecasting model that suggests enrollment is highly sensitive to "net price" changes. See *15-year Enrollment and WSCH Forecast, Chancellor's Office 1996 Forecast Using Statewide Data*, Sacramento: California Community Colleges, January 1996. The estimated effect of a $1 increase in real costs is to lower statewide enrollment by around 1,300 students. The implied elasticity is roughly in line with existing academic evidence.

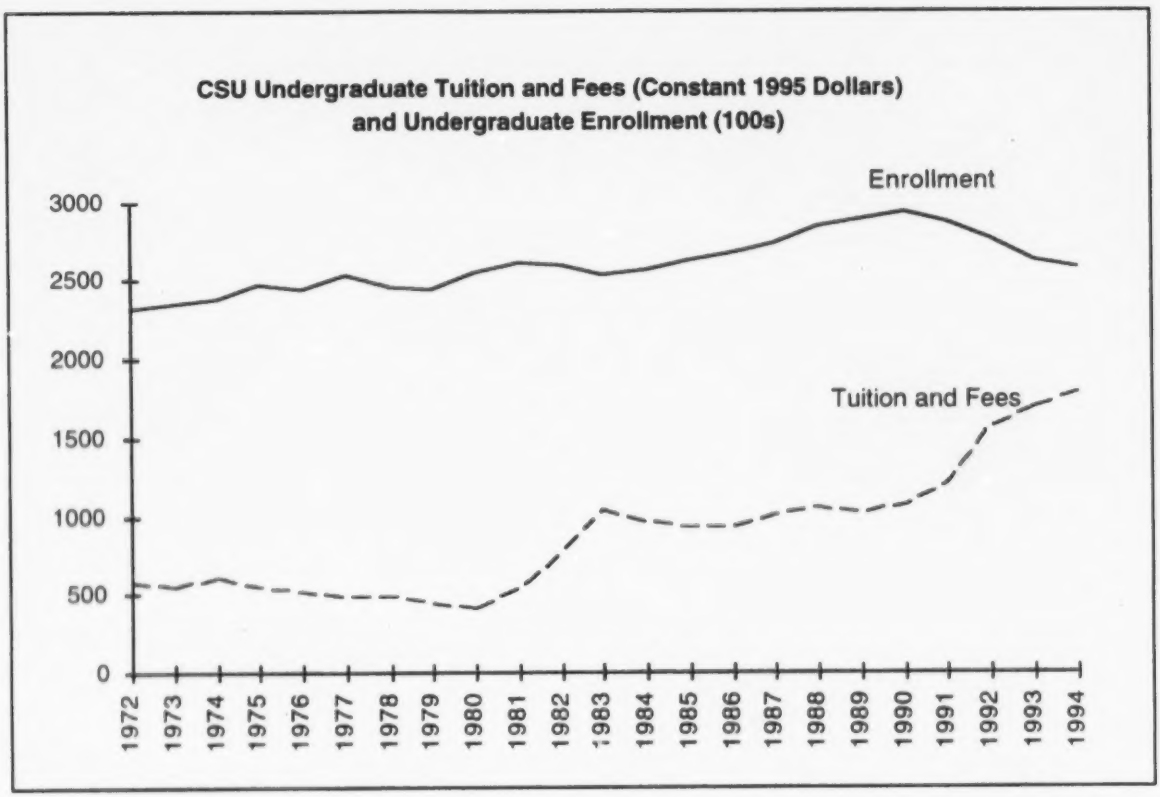
[45]There is also anecdotal evidence that some of the enrollment decline may be due in part to funding pressure, which forced the cancellation of classes. This is a reminder that enrollment is, strictly speaking, the result of *both* student demand for places in college and institutional supply of places. Until relatively recently, consideration of the supply side for public institutions in California was largely unnecessary.

[46]*The New Basic Agenda: Policy Directions for Student Success*, Sacramento: Board of Governors, California Community Colleges, June 1996



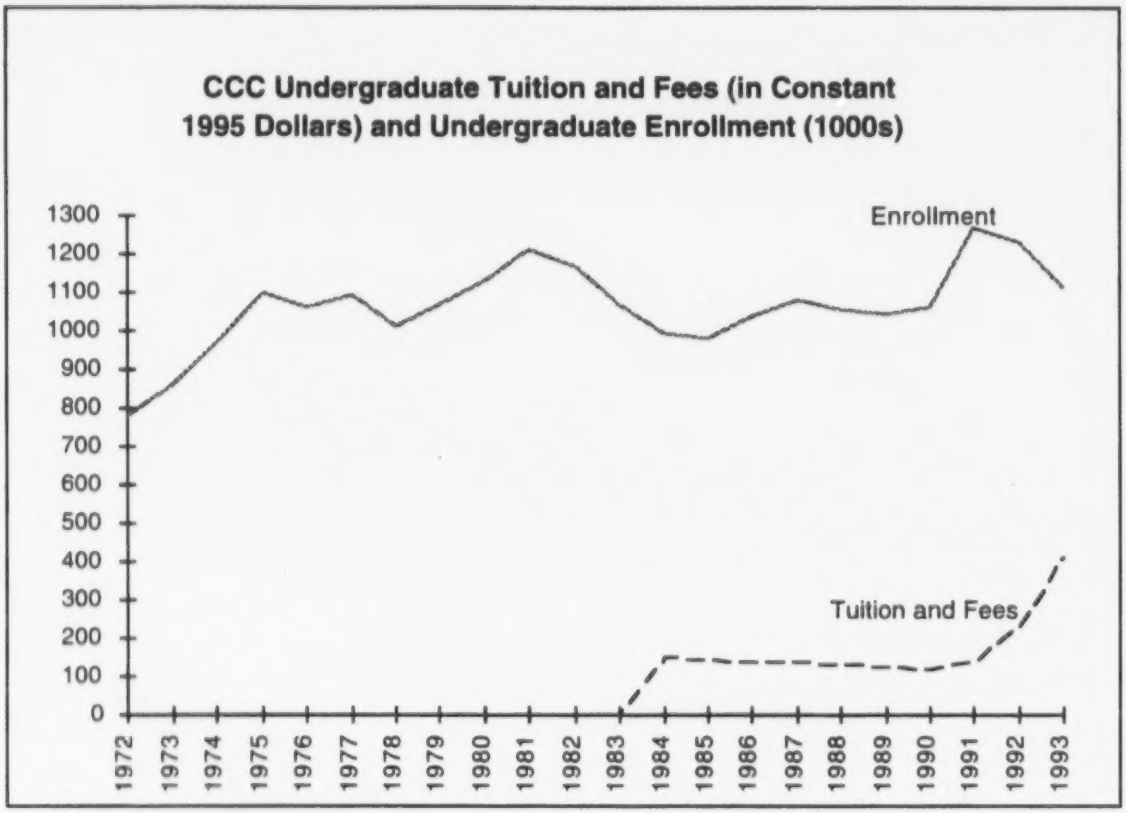
SOURCE: California Postsecondary Education Commission; National Center for Education Statistics

Figure 10



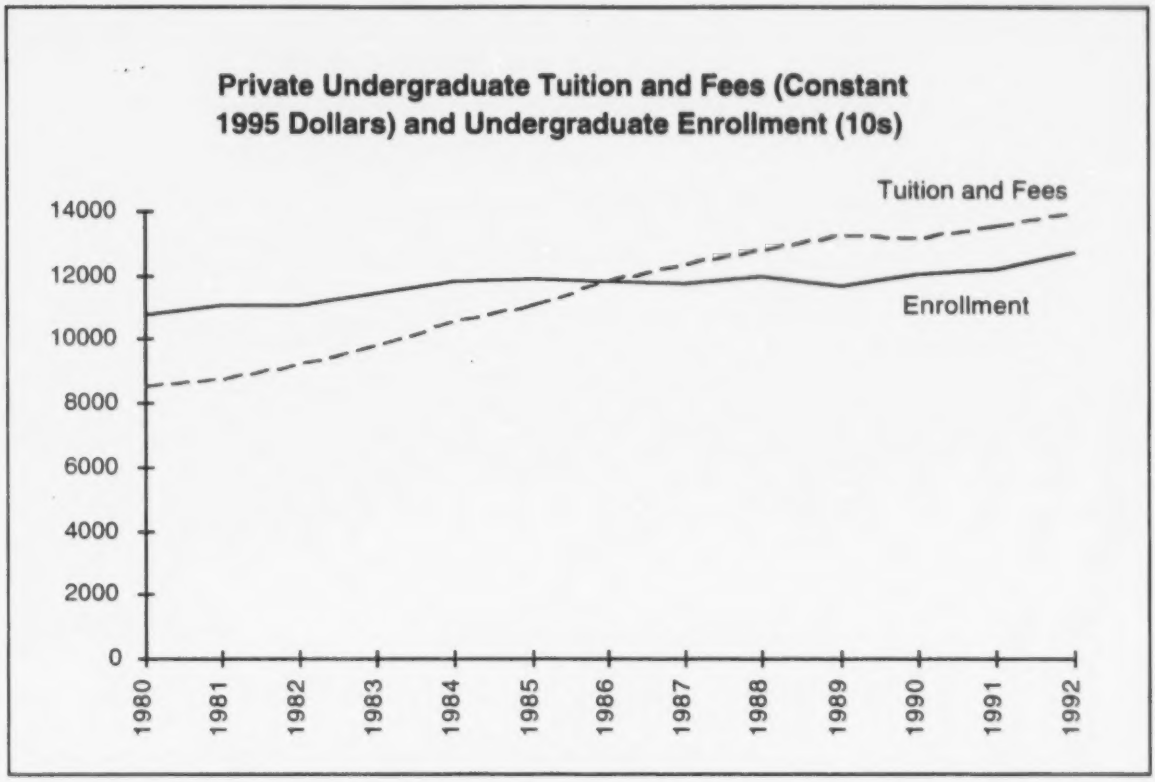
SOURCE: California Postsecondary Education Commission; National Center for Education Statistics

Figure 11



SOURCE: California Postsecondary Education Commission; National Center for Education Statistics

Figure 12



SOURCE: California Postsecondary Education Commission; National Center for Education Statistics

Figure 13

"Historically, student aid has been a relatively peripheral issue in the financing of California higher education."[47] Rising tuition/fees have put the financial aid system under strain. Federal Pell Grants now cover only a third of the average cost of a public institution and have become basic subsistence grants for the neediest students. The burgeoning of federal student loans facilitates access to college for a large number of students, although there is concern over increasing debt levels, as well as the issue of a lower willingness to borrow among traditional college-going populations. The Cal Grant program was never designed for this framework: it was designed to promote attendance at independents in the context of negligible public institution fees. It has evolved in an ad hoc way—it has "drifted from original purpose without clear redefinition."

As revised in the late 1980s, the Master Plan calls for increased funding of Cal Grants. Specifically, the number of new Cal Grant awards should be 25% of high school graduates, the maximum grant for public institutions should cover full mandatory fees, and the maximum grant for students at independent colleges should equal the cost of educating a student at a four-year public school. None of these objectives has been met. Only 12% of high school graduates are funded, campus-specific fees are not included in Cal Grants, and the maximum independent award is perhaps three-fifths of the cost of educating a student at a public four-year institution. Further, UC students now receive more Cal Grant dollars than those at the independents, clearly a shift from the original purposes of the program. The resulting failure to fund Cal Grants to their intended level, along with tuition hikes and federal aid changes, has resulted in an unplanned increase in institution-based aid, funded in large part through tuition dollars; in 1993/4, close to 60% of institution-based aid at UC and CSU came from student fee revenues.

Finally, it is worth noting that these problems with the current system of tuition and financial aid in California are likely to persist or worsen. The federal financial aid system is unlikely to undergo any major changes that would increase available funding for students or institutions; in fact, the opposite is more likely. Personnel, equipment, maintenance, and other educational costs continue to rise and put pressure on colleges and universities to seek additional sources of revenues. In California, prospects for the state's fiscal future[48] suggest that there are unlikely to be additional revenues for increasing (or even holding flat) tuition subsidies per student at public institutions, and there is unlikely to be much additional funding for state financial aid programs. Without institutional aid to make up the shortfall, access will be potentially threatened. The funding of institutional aid is only possible if further hikes in tuition are made and then those tuition dollars are "recycled"to some students in the form of aid, or if state appropriations grow. While such cross-subsidies are not inherently problematic, there needs to be explicit recognition that they are being done. Higher tuition may of course be desirable; tuition and financial aid policy may be the main tool for dealing with the projected growth in the state's college-age population

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[47] Gladieux and King, *Trends in Student Aid: California*, p. 11.
[48] Stephen Carroll et al., *Projecting California's Fiscal Future*, MR-570, Santa Monica, CA: RAND.

("Tidal Wave II").[49] It is hard to envisage California being able to maintain its historically high levels of access to higher education.

CONCLUSIONS: WHAT ARE THE OPTIONS FOR IMPROVING THE SYSTEM OF TUITION/FEES AND FINANCIAL AID?

The preceding sections provided background information that should be useful in considering changes to the system of tuition/fees and financial aid in California. This section does *not* present specific proposals or recommendations; rather, it suggests steps that must be undertaken in designing a coherent policy that will best serve the interests of the state in the future.

Surprisingly, there are almost no coherent, large-scale policy proposals under consideration that would radically change the current setup of fees and financial aid. On the other hand, previous analyses have suggested that the current system has some important problems. Proposals that have appeared concentrate on changing the rules, eligibility requirements, and funding levels of the state's Cal Grant programs. These include, for example, removing the requirement that more than 50% of Cal Grant B's be awarded to CCC students, or limiting new Cal Grant A awards to first-time freshmen or to juniors who are CCC transfers (as proposed by UC); or replacing Cal Grant A's, B's, and C's with slightly modified programs (as proposed by CSU); or allowing Cal Grant A awards for CCC students, and abolishing the 50% rule for Cal Grant B's and putting their funding on a par with Cal Grant A's (as suggested by CCC). However, all parties can agree that Cal Grants are underfunded relative to student need under the program's own rules; one simple change would be to fully fund the existing programs.

While Cal Grants are an important part of the overall financial aid picture, and changes to their structure would affect student enrollment decisions and choices at the margin, they are clearly not the most important factor in establishing a more coherent policy environment for students and institutions. Most aid comes from federal sources. A great deal of aid also comes from institutions themselves, much of it generated by "recycled" tuition dollars. The need for aid is inextricably linked to fees (again, recognizing that fees are only one part of the cost of college). Given the magnitude of the changes in student numbers and the state's structural budget problems (as detailed in other RAND documents), it would make little sense to tinker with the Cal Grant system without considering the broader question of how fee levels are set for public higher education institutions in the state, and to derive both state and institutional aid programs with reference to those fees. The uses and financing of institutional aid as opposed to state aid are an important part of this equation and clearly need to be on the table.

Further, since enrollment and revenues are sensitive to financial aid and fees, decisions regarding these matters need to be derived from a view as to the future of the Master Plan itself. Fees and aid are clearly an important available tool in managing enrollment and generating revenues. Possible changes,

[49] None of the existing enrollment forecasts take account of tuition and financial aid responsiveness for students as a whole, or across types of students, or across types of institutions. See, for example, California Postsecondary Education Commission, *A Capacity for Growth;* Breneman, Estarada, and Hayward, *Tidal Wave II: An Evaluation of Enrollment Projections for California Higher Education;* Shires, *The Future of Public Undergraduate Education in California.*

particularly in the level and structure of fees and/or aid, could significantly affect the long-term makeup of the student body, the distribution of enrollment between types of institutions (including the independents), and, most fundamentally, whether Californians are provided with access to higher education.

The answers to these more basic questions will suggest whether a piecemeal approach to the aid and fee structure can accomplish the goals upon which policymakers agree, or whether more radical alternatives are needed. Some changes could have significant beneficial effects—for example, establishing a long-term fee schedule with planned, publicly known increases tied either to personal income or some measure of the underlying true costs of education would minimize the likelihood of large and sudden fee increases in economic downturns followed by no increases when the state economy is better. Other issues that might be considered—such as the distribution of fee revenues, the use of these revenues for student aid, and the significance of state versus institutional aid—are thorny. As several of the policy documents currently circulating suggest, a good way to begin tackling these issues is to generate a key set of principles for fees and aid with which everyone can agree—i.e., a set of overarching goals for any redesigned system—and to place them within the context of the overall plan for higher education in the state.

More radical alternatives should also be considered, such as a move to a "high fee, high aid" environment. This would mark a major change in policy emphasis for higher education in California. Other states have essentially used such an approach for years, but the jury is out on whether they have maintained the high levels of access and quality that have been the hallmark of California higher education. This policy has the potential to encourage interinstitution competition for students and to eliminate some of the subsidy that uniformly low tuition provides to all citizens regardless of their income levels. Moving to such an approach presents real design difficulties, however. For example, there is anecdotal evidence that students respond to the "sticker price" associated with college, not the net price. Whether a clear and widely known structure of fees and financial aid could be devised to minimize the adverse effect that high fees have on access is not clear. Ensuring that aid is targeted to those who really need it is not a simple matter. But given the scale of the problems that the state's higher education system will face over the next two decades, the "high fee, high aid" option should at least be on the table.